



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

December 20, 1994

Bureau of Land Management  
Ridgecrest Resource Area  
300 South Richmond Road  
Ridgecrest, California 93555  
Attention: Mr. Ahmed Mohsen

Dear Mr. Mohsen:

The U.S. Environmental Protection Agency (EPA) has reviewed the **Rand Project Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR)**, prepared by the Bureau of Land Management (BLM) and the Kern County Planning Department. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementation Regulations at 40 CFR 1500-1508, and §309 of the Clean Air Act.

The Draft EIS/EIR evaluates the construction and operation of a conventional heap-leach processing project that would disseminate gold from ore recovered from an open pit excavation mine in eastern Kern County, California. Ore would be processed at a rate of approximately 6 million tons annually for approximately 10 years. At its completion, approximately 511 acres of land would be disturbed by this proposal. Decommissioning of the site and final reclamation would occur for about 1-2 years after completion of operations.

We have rated this Draft EIS/EIR as EC-2 -- Environmental Concerns-Insufficient Information (See the enclosed "Summary of Rating Definitions and Follow-Up Action"). Our rating reflects the need for additional information in the Final EIS/EIR regarding possible impacts to surface water, wildlife habitat, closure of the heap leach pad, and contingency measures. The Final EIS/EIR should discuss the relationship between the proposed mine and the new California Desert Protection Act, and should include information pertaining to the reclamation or maintenance of the heap leach pad after project completion.

We have also assigned the EC-2 rating because the document only fully assesses 2 alternatives, the project proponent's proposal and no-action. The FEIS should include a range of reasonable alternatives as required by CEQ regulations [40 CFR 1502.14]. The DEIS Abstract lists 4 alternatives that would be assessed "in detail," but the DEIS itself includes only a brief rationale for the elimination of the 3 "action" alternatives.

The FEIS should include much more detailed analysis of alternatives such as a "Reduced Project Alternative" or provide greater rationale for eliminating such alternatives.

We appreciate the opportunity to review this Draft EIS/EIR. Please send a copy of the Final Environmental Impact Statement to my attention at the letterhead address (mail code E-3) at the same time it is officially filed with our Washington, D.C., office. If you have any questions, please contact me at (415) 744-1584 or Edward Yates of my staff at (415) 744-1571.

Sincerely,

A handwritten signature in cursive script, appearing to read "David J. Farrel", followed by the initials "(for DP)" in parentheses.

David J. Farrel, Acting Chief  
Office of Federal Activities

enclosure  
MI#001902

## **Alternatives**

The Abstract describing the proposed action states that, "Four alternatives to the Proposed Action are analyzed in detail in the Draft EIS/EIR." These alternatives include no action, reduced project, facility location and partial backfilling. Such a range of alternatives would be a proper range of reasonable alternatives as required by CEQ regulations [40 CFR 1502.14]. However, the document itself does not include a detailed alternatives assessment for the latter 3 alternatives. Instead, the DEIS only includes a brief analysis for each of the 3 alternatives to support the decision to eliminate those alternatives from consideration. Such brief discussions do not qualify as "in detail" as reported to the public in the Abstract.

The FEIS, therefore should include a detailed analysis as required by CEQ regulations. We suggest that the EIS include a more detailed discussion of the reduced project alternative. That the impacts of a reduced project alternative are significant do not alone render such an alternative unreasonable and subject to elimination. Such a discussion does not have to repeat the applicable analysis made in the Baltic Mine EIS [pg. 3-6] but must include a summary of the findings of the Baltic Mine EIS and a description of how such an alternatives analysis applies to the specific environmental setting of the Rand Project.

## **Water Resources**

1. pg. 6-2: The DEIS does not clearly describe the extent of the potential impacts to creeks (including ephemeral), springs, and seeps (e.g. specific flow reductions, acreage affected, seasonal effects, number of decades the effects would occur). Furthermore it appears that there is little groundwater monitoring proposed for the project. It is unclear what the potential impacts to groundwater/surface water quantity would occur during the 12-year life of the project. EPA objects to reduced surface flows that may adversely affect beneficial uses and/or habitat. The FEIS should discuss avoidance, minimization, and mitigation of losses or modification of surface waters, habitat, and plant and animal species composition.

## **Water Quality and Hydrology**

1. pg. 2.39: The mine pit would divert stormwater runoff from areas adjacent to the project; other flows would be permitted to pass through the pits. Severe rainfall could cause substantial amounts of water to accumulate or "pond" in the mine pit. Under No Action conditions, such water would be expected to flow unimpeded through the project site. The Final EIS/EIR should examine the amount of water that would be diverted and the effects to any downgradient riparian habitat should be addressed.

Furthermore, the Final EIS/EIR should address why project reclamation design does not include features to divert stormwater flow around the mine pit and back to its normal course.

In presenting the above information, the Final EIS/EIR should include an assessment of whether the water diverted to the mine pit would be considered "waters of the U.S.," and therefore be subject to Section 404 of the Clean Water Act.

2. pg. 5-5: We suggest that the Final EIS/EIR include discussion of methods by which water could be diverted from the waste rock piles, mine pit and heap leach pad. Such methods could include run-on and run-off channels.

### **California Desert Protection Act**

1. pg. 4-42: The Final EIS/EIR should include an update of all aspects of the project that may have been affected by the recent passage of the California Desert Protection Act.

2. pg. 5-14: The DEIS only looks at existing Class I airsheds. The Final EIS/EIR should disclose whether the newly designated Wilderness Areas in the region of the project site, as well as Death Valley National Park, will be designated as Class I airsheds under the Act. If so, the project should be reexamined with regard to the relatively stringent standards imposed on Class I airsheds and their vicinities.

### **Closure and Reclamation**

1 pg. 2-62: The Final EIS/EIR should disclose whether the heap leach pad would be remain in place in perpetuity, or eventually reclaimed. The Final EIS/EIR should also identify who would be responsible for reclaiming the heap leach pad. If the heap leach pad is not to be reclaimed, a rationale for this decision should be provided.

2. pg. 2-62-63: The Final EIS/EIR should specify the requirements for testing the adequacy of heap leach rinsing. Recirculation of the leach solution and rinse solution may result in accumulation of other metals and constituents besides cyanide if gold and silver are the only metals removed from the pregnant and rinse solutions, as described on Draft EIS/EIR page 1-1. After neutralization and treatment of the heap leach material has been conducted and effluent standards have been met, subsequent testing of heaps may reveal increased concentrations of cyanide and other constituents. We recommend that, after neutralization and detoxification standards have been met, subsequent sampling

of the heaps be conducted following periods of rain before the heap material is deemed "clean."

In addition, it is unclear that the heap leach would be effectively rinsed. Incomplete neutralization or treatment of cyanide in heaps can be caused by blind-offs, less permeable lenses or isolated areas of a heap, which affect percolation and fluid flow through the heap. Preferential flow paths and blind-offs (areas or pockets of the heap leach that are avoided by the course of the rinseate) increase with time and the volume of liquid used. If the heap leach material is of relatively fine size, it could require a long rinsing period. Preferential flow paths can limit the effectiveness of treatment and may leave pockets of contaminants behind in the heap. The Final EIS/EIR should specify the particle size of the heap leach materials, how the heaps would be sampled, what other constituents besides cyanide would be analyzed, when and how often heaps would be sampled, and the specific rinsing standards that would be applied.

3. pp. 2-62 to 63: As stated above, EPA recommends that sampling of the heap leach pad be conducted at least several months after rinsing activities are conducted. To further enhance testing accuracy, we recommend that solid core sampling be conducted to test rinse standards as opposed to the less-accurate method of sampling the rinseate.

4. pg. 2-63: The Final EIS/EIR should present a contingency measure or series of measures that would be enacted if rinsing standards cannot be conventionally achieved.

5. pp. 2-47: According to the Draft EIS/EIR, the seed mix that would be used to revegetate the project site during reclamation would include plant species "adapted" to the area. EPA recommends that BLM consider seeding only native or indigenous plants.